

AMENDMENTS TO THE DRAWINGS:

In the Office Action, the Examiner objected to the drawings. In order to overcome these objections, replacement figures are submitted herewith. In FIGs. 1 and 2 have been labeled "Prior Art" as requested by the Examiner. Approval of these changes to the Drawings is respectfully requested.

REMARKS

In accordance with the foregoing, the specification and claim, have been amended. Claim has been cancelled. Claims 1-16 are pending and under consideration.

In the Office Action mailed November 17, 2004, the Examiner noted that claims 1-16 were pending, that claims 11-13 have been withdrawn from consideration, objected to claim 6 and rejected claims 1-5, 7-10 and 14-16. Claims 1-3, 5, 6, 9, 10 and 14-16 have been amended, claim 7 has been canceled, new claim 17 has been added and, thus, in view of the foregoing claims 1-6, 8-10 and 14-17 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections and objections are traversed below.

In the Action on page 2 the Examiner objected to the drawings and the drawings have been amended in consideration of the Examiners comments. Withdrawal of the objection is requested.

In the Office Action the Examiner objected to claim 6 and indicated that this claim would be allowable if rewritten in independent form. This claim has been so rewritten as new claim 17 and it is submitted that new claim 17 has not been narrowed and has the same scope as prior to being made independent and is now allowable. Withdrawal of the objection is requested.

On page 3 of the Office Action, the Examiner rejected claims 1-5, 7, 10 and 14-16 under 35 U.S.C. § 102 as anticipated by Chou. Page 5 of the Office Action rejects claims 8 and 9 under 35 U.S.C. § 103 over Chou and Nishimoto.

The present invention of claim 1 relates to an accurate/precise measurement of degree of polarization (DOP) using a "polarimeter". The DOP or "intensity signals measured" by the "plurality of optical components" of the polarimeter are used as "a feedback signal" to control or adjust an optical unit receiving and outputting an optical signal. In particular, the DOP can be precisely measured by arranging the polarimeter such that "a Poincaré sphere is fully covered by the intensity signals".

Chou discusses a system that is like the conventional system discussed on page 16 of the present application starting at line 13 where the polarization state is determined, not the degree of polarization. In particular:

A real-time optical compensating apparatus reduces the PMD in an optical fiber by determining the **principal states of polarization** of the optical fiber and delaying one principal state of polarization with respect to the other.
(Chou, Abstract, **bold emphasis added**)
Polarization controller 100 includes a lens 104, a beam splitter 105, a polarimeter 110, and a polarization transformer 108. Lens 104 positioned at an input 102 of polarization controller 100 collimates optical signals (not shown) from output 21 of

optical fiber 22 along an optical path 160. Optical path 160 extends from input end 102, through beam splitter 105, polarization controller 108, and out output end 103. Beam splitter 105 redirects a portion of the optical signal propagating along beam path 160 into polarimeter 110 which detects the redirected optical signals and sends a series of electronic signals through cables 122 to an I/O port 119 of a computer 120. Computer 120 uses the electronic signals in an algorithm stored in the computer's CPU **to determine the principal states of polarization (PSPs)** of optical fiber 22 and sends control signals to modify the settings of a first retarder 140 and a second retarder 150 in polarization transformer 108. First retarder 140, e.g., a quarter-waveplate, and second retarder 150, e.g., a half-waveplate, transform the polarization of the PSP such that light exiting polarization controller 100 is linearly polarized and aligned to the x- and y-axis of delay controller 200.

(Chou, col. 3, lines 37-56, **bold emphasis added**)

The features of claim 1 discussed above are not taught or suggested by Chou.

Nishimoto adds nothing to Chou with respect to the features discussed above.

Independent claims 10, 14, 15 and 16 emphasize similar features,

It is submitted that the invention of the independent claims distinguishes over the prior art and withdrawal of the rejection is requested.

The dependent claims depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by the prior art. For example, claim 3 emphasizes the use of the azimuth and ellipticity of the an ellipse around plotted points. The prior art does not teach or suggest such. It is submitted that the dependent claims are independently patentable over the prior art.

It is submitted that claim 17 (claim 6 rewritten into independent form) continues to be allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

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If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

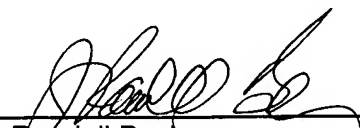
Respectfully submitted,

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5/17/15

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